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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/558,237	04/24/2000	Chae-Man Lim	678-475 (P9174)	8647
7590	10/06/2003			EXAMINER HARPER, KEVIN C
			ART UNIT 2666	PAPER NUMBER

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/558,237	LIM, CHAE-MAN	
	Examiner	Art Unit	
	Kevin C. Harper	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 24 April 2000.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> | 6) <input type="checkbox"/> Other: _____ |

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

1. Figure 6 is objected to because item 610 requires descriptive wording (37 CFR 1.83(a)). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02. The oath or declaration is defective because the listed application 1999 14737 should have a date of April 24, 1999.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-12 and 14-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Ostberg et al. (US 6,504,830).

3. Regarding claims 1, 3, 5, 7, 9 and 14, Ostberg discloses a signal transmitting apparatus (Figure 1A, item 120; abstract, lines 1-4) and receiving apparatus (Figure 1A, item 130). The apparatus has an inherent primary synchronization channel transmitter (Figure 2B, PSC in Perch 1) for placing synchronization information in several slots and an inherent secondary synchronization channel transmitter (Figure 2B, SSC in Perch 2) for having a group specific code at the beginning of each slot (col. 5, lines 44-46; col. 6, lines 63-67; col. 7, lines 1-20) with a specific code (Figure 4, items 420-440) which represents one base station in the group.

4. Regarding claims 2, 4, 6 and 8, the apparatus has a broadcast channel (Figure 3A) which is mapped to the SSC (abstract, lines 6-7; col. 6, lines 22-25 and 30-35).

5. Regarding claims 10, 12, 15 and 17, a group specific code detecting unit comprises a correlator for calculating the correlation in each slot (col. 7, lines 46-62) and a base station group detector for determining a base station group using specific codes corresponding to a maxima of correlations detected (col. 7, lines 14-20).

6. Regarding claims 11 and 16, the group detector comprises an inherent shift operator for comparing correlations to an inherent comma free code table (col. 8, lines 15-24) and a maximum correlation detector for detecting a synchronization code corresponding to a maximum cyclic shifted correlation (col. 7, lines 14-20).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 13 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Ostberg et al., as applied to claim 12 or 17 above, in further view of Nystrom et al. (US 6,526,091).

7. Regarding claims 13 and 18, Ostberg discloses using Gold sequences (col. 3, lines 46-49) and does not disclose correlating Hadamard sequences by a Hadamard transformation. Nystrom discloses using a less complex Hadamard sequence instead of a Gold sequence in a multi-user system (col. 10, lines 1-3 and 25-29). Therefore, it would have been obvious to one skilled the art at the time the invention was made to correlate a Hadamard sequence in the invention of Ostberg.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Park et al. (US 6,603,735) and Sarkar (US 2002/0057664) each discloses a primary synchronization channel and a secondary synchronization channel for use in a cellular network.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays, except Wednesday, from 9:30 AM to 8:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The fax number for Technology Center (TC) 2600 is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office for TC 2600 at 703-306-0377.

Kevin C. Harper

September 30, 2003

Seema S. Rao
SEEMA S. RAO 10/1/03
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600